

# EXHIBIT 1

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UNITED STATES DISTRICT COURT  
IN AND FOR THE DISTRICT OF WYOMING

STEPHANIE WADSWORTH, )  
individually and as )  
Parent and Legal ) CASE NO.  
Guardian of W.W., K.W., ) 2:23-cv-00118-NDF  
G.W., and L.W., minor )  
children, and MATTHEW )  
WADSWORTH, )  
Plaintiffs, )  
v. )  
WALMART, INC. and JETSON )  
ELECTRIC BIKES, LLC, )  
Defendants. )

ORAL DEPOSITION OF

DEREK A. KING, M.S., P.E.

MONDAY, AUGUST 19, 2024

REPORTED BY:

DEBRA A. DIBBLE, FAPR, RDR, CRR, CRC, Notary Public

California CSR 14345

JOB NO. 44990

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1 Another was -- I believe it was -- it was  
2 in a dry cleaner. We actually didn't get very far  
3 in that investigation, so...

4 Q. So for the other fire claims in which you  
5 have been the identified expert, or the primary  
6 engineer from BEAR, we have two refrigerator cases,  
7 one battery -- or marine battery case, and then a  
8 case at a dry cleaner facility?

9 A. Yes. There was another one. It was an  
10 appliance -- appliance and wiring at a house.

11 Q. What type of appliance?

12 A. That wasn't -- we -- that wasn't clear.  
13 We didn't get very far in that investigation.

14 Q. Fair to state that you have never been  
15 the primary expert or an identified expert by a  
16 party that is claiming that there was a lithium-ion  
17 battery failure that caused a fire?

18 A. Correct.

19 Q. We'll mark your CV as 70.

20 (King Deposition Exhibit 70 marked.)

21 BY MR. LAFLAMME:

22 Q. There you go, Mr. King.

23 Mr. King, I've handed you what's been  
24 marked as Exhibit 70, which is a copy of the CV that  
25 was produced in this case. And it looks like you

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1 job during -- was it your last year of school?

2 A. Yeah.

3 Q. And then once you graduated from  
4 UC Berkeley, that's when you went to work for BEAR?

5 A. Yes.

6 Q. Was that job at BEAR, was -- did you have  
7 any jobs in between BEAR and the time you graduated  
8 UC Berkeley?

9 A. No.

10 Q. So it sounds like, for all intents and  
11 purposes, for your professional career, it has  
12 always been at BEAR?

13 A. Yes.

14 Q. Have you ever -- or strike that.

15 You haven't ever worked for a company  
16 that designs or manufactures lithium-ion battery  
17 products, correct?

18 A. Correct.

19 Q. And you have never personally designed or  
20 manufactured a lithium-ion battery product, correct?

21 A. Correct.

22 Q. And you have never been involved in the  
23 design or manufacture of a lithium-ion battery pack,  
24 correct?

25 A. Correct.

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1 Q. Are you a member of any professional  
2 organizations?

3 A. No.

4 Q. And I know you -- on your CV you have the  
5 PE designation. When did you get that?

6 A. I believe that was in -- I think that was  
7 in the fall of 2023.

8 Q. So approximately a year ago is when you  
9 got your PE designation?

10 A. Yeah.

11 Q. And where are you licensed as a PE?

12 A. California.

13 Q. Any other states?

14 A. No.

15 Q. And I take it you have never been on a --  
16 any of the UL technical committees?

17 A. Correct.

18 Q. You haven't been on any of the NFPA  
19 technical committees?

20 A. Correct.

21 Q. No ANSI technical committees?

22 A. Correct.

23 Q. And really, no technical committees of  
24 any standard-issuing organization, correct?

25 A. Correct.

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1 A. Yes.

2 Q. And was that the -- was that the only  
3 role that you played with respect to that other  
4 hoverboard case with Rong?

5 A. Yes.

6 Q. And I assume you weren't named as an  
7 expert in that case, correct?

8 A. Correct.

9 Q. Do you know if any of your opinions have  
10 ever been limited or stricken in any manner by a  
11 judge?

12 A. There -- I believe so. I'm not aware of  
13 the details.

14 Q. Okay. Do you know the name of the case  
15 or cases in which that occurred?

16 A. Possibly Ibarra, I-B-A-R-R-A.

17 Q. And what happened with that case?

18 A. I don't really know the details.

19 Q. Was that Jason Ibarra versus Future  
20 Motion case?

21 A. Yes.

22 Q. Okay. And that was the -- a case out of  
23 the Southern District of Florida?

24 A. That sounds correct.

25 Q. And as far as what the decision was in

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1 A. No.

2 Q. And you are relying on Mr. Schulz in this  
3 case for his origin opinion as to where the fire may  
4 have started, correct?

5 A. Schulz, or any other -- any other  
6 investigators. I don't recall the different  
7 investigators and roles specifically.

8 Q. Needless to say, you do not have any  
9 opinions in this case as to the origin of the fire,  
10 correct?

11 A. Right.

12 Q. And you do not intend to testify at trial  
13 as to any issues related to the origin of the fire,  
14 true?

15 A. Correct.

16 MR. AYALA: Just object to the form  
17 of that question.

18 BY MR. LAFLAMME:

19 Q. You did not do an origin investigation,  
20 correct?

21 A. Correct.

22 Q. You were not at any of the site  
23 inspections, correct?

24 A. Correct.

25 Q. Do you know what NFPA code applies to

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1 origin investigations?

2 A. No.

3 Q. And just to clear up any objections, you  
4 are not offering an origin opinion in this case at  
5 all, correct?

6 A. Correct.

7 (King Deposition Exhibit 71 marked.)

8 BY MR. LAFLAMME:

9 Q. Sir, I'm going to show you what's been  
10 marked as Exhibit 71.

11 And could you describe what 71 is?

12 A. 71 is a document summary.

13 Q. And what does that mean? This was one of  
14 the documents within your expert files.

15 A. This is a -- I'll call it a high-level  
16 summary of what the documents contain, what  
17 information is in the documents that we were  
18 provided at the time.

19 Q. So what is the date that this summary is  
20 put together?

21 A. I don't know the date that this was  
22 started or the last time I edited this.

23 Q. Is this something that you start when you  
24 receive an assignment?

25 A. It would be when we received materials,



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1 so there's probably a date for when we received --  
2 started receiving documents.

3 Q. And does this document summary, does this  
4 cover all of the documents that you have received in  
5 this case?

6 A. This summary does not have any  
7 information on depositions.

8 Q. Okay. What depositions have you reviewed  
9 in this case?

10 A. There were -- there was a -- I believe a  
11 Walmart representative. I believe there was a  
12 Jetson representative. And I briefly reviewed the  
13 Sheaman deposition.

14 I have just received some depositions of  
15 the family, but I haven't had the -- really had a  
16 chance to review those.

17 Q. Okay. When did you obtain the Sheaman  
18 dep transcript?

19 A. I believe that was Friday.

20 Q. So after you issued your report?

21 A. Yes.

22 Q. Have you reviewed the whole Sheaman dep  
23 transcript?

24 A. I would say no.

25 Q. It was a pretty lengthy one.

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1 A. It was.

2 Q. All right. So you looked at part of it  
3 over this weekend?

4 A. Skimmed it, yeah.

5 Q. How much of it did you read?

6 A. Not much.

7 Q. And then did you say the Wadsworth family  
8 or the Wadsworth father?

9 A. Family.

10 Q. So Mr. and Mrs., and the four children?

11 A. Yes, I believe that's what's in there.

12 Q. Did you receive that on Friday as well?

13 A. Yes.

14 Q. And it sounds like you have not reviewed  
15 those dep transcripts yet?

16 A. No.

17 Q. Any other dep transcripts that you have  
18 received in this case?

19 A. No.

20 Q. Did you review the Walmart and Jetson  
21 corporate rep depositions?

22 A. Yes.

23 Q. When you do that, do you take notes on  
24 the transcript?

25 A. Yes.

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1 Q. You have not reviewed any of the body  
2 camera footage from this case, have you?

3 A. I have not.

4 Q. Did you even know there was body camera  
5 footage from immediate -- immediately after the  
6 accident?

7 MR. AYALA: Form.

8 A. I don't know. I didn't recall, unless it  
9 was -- maybe it was mentioned in the sheriff report,  
10 but...

11 BY MR. LAFLAMME:

12 Q. Regardless, you haven't reviewed any of  
13 the body camera footage from the responding police  
14 officers that responded the morning of the fire,  
15 correct?

16 A. Correct.

17 Q. And you're not aware of any statements  
18 that would have been made on that body camera  
19 footage by any of the Wadsworth children, correct?

20 A. Correct.

21 Q. And you're not aware of any of the  
22 statements that would have been made on that body  
23 camera footage from Mr. Ryan Pasborg, correct?

24 A. Correct.

25 Q. Do you know who Ryan Pasborg is?

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1           A.     I think he was the first one on scene, if  
2 I remember correctly.

3           Q.     He was the good samaritan that assisted  
4 in getting the Wadsworth family out of the house.

5                     You're not aware of any statements he  
6 would have said on that body camera footage about  
7 where he first saw fire, correct?

8           A.     Correct.

9           Q.     Do you know what UL codes are applicable  
10 to the design and manufacture of this hoverboard?

11          A.     I believe there's the UL -- I want to say  
12 2722, if I remember the number correctly.

13          Q.     You were close. It's UL 2272.

14          A.     2272. Okay.

15          Q.     Any other UL codes that you are aware of  
16 that would apply to the design or manufacture of  
17 this hoverboard?

18          A.     I know there's another one that deals  
19 with lithium-ion batteries. I don't recall the  
20 number offhand.

21          Q.     Okay.

22          A.     Yeah.

23          Q.     Do you know what the -- so you don't know  
24 what the UL code is that applies to the specific  
25 lithium-ion battery cells, correct?

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1 A. Correct. Not offhand.

2 Q. And in this case, it's your opinion that  
3 two of the -- two of the ten battery cells that were  
4 in this battery pack experienced an internal short  
5 circuit with thermal runaway. Correct?

6 A. Yes.

7 Q. And you've identified those in your  
8 report as cells 4 and 10?

9 A. Yes.

10 Q. So you believe that it is a -- an issue  
11 with the lithium-ion battery cells, for cell 4 and  
12 10, that caused this fire? At least that's your  
13 opinion in this case, correct?

14 A. Yes.

15 Q. But you don't know what UL code applies  
16 to these specific lithium-ion battery cells?

17 A. I don't recall the number.

18 Q. Do you know if the lithium-ion battery  
19 cells in this hoverboard were UL listed?

20 A. I did not check that, so I don't know.

21 (King Deposition Exhibit 72 marked.)

22 BY MR. LAFLAMME:

23 Q. We'll mark as Exhibit 72, this is a copy  
24 of a PowerPoint presentation that you went  
25 through -- or at least put together, correct?

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1 here it shows the battery cell from an exemplar  
2 Plasma unit, correct?

3 A. Yes.

4 Q. And how is it that you obtained the  
5 exemplar Plasma unit?

6 A. I purchased.

7 Q. From where?

8 A. eBay.

9 Q. When did you purchase the exemplar  
10 Plasma?

11 A. Should be a few months ago. I don't  
12 remember exactly.

13 Q. Had you purchased the exemplar Plasma  
14 before the lab inspection that we were at at your  
15 place in February?

16 A. No.

17 Q. Did you do anything to determine who the  
18 manufacturer was of the battery cell for the Plasma  
19 unit?

20 A. No. My understanding is JDDL is the name  
21 of a manufacturer, but beyond that...

22 Q. Do you know which manufacturer name that  
23 is?

24 A. No.

25 Q. Have you seen any of the document

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1 productions that Jetson has made in this case?

2 A. I don't believe so.

3 Q. You haven't seen any of the UL test

4 reports or certification records in this case?

5 A. I have not.

6 Q. We'll mark this as 74.

7 (King Deposition Exhibit 74 marked.)

8 BY MR. LAFLAMME:

9 Q. Handing you what's been marked as  
10 Exhibit 74, which is a Bates document that starts  
11 with JETSON 311.

12 Do you see that in the lower right-hand  
13 corner?

14 A. Yes.

15 Q. And you have not seen this before,  
16 correct?

17 A. Correct.

18 Q. If you go to the second page of this  
19 document, there's a description of this battery.  
20 And you can see the model number is INR, all  
21 capitalized, 18650P.

22 Do you see that?

23 A. Yes.

24 Q. And that's the same model number on this  
25 battery cell, correct?

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1 Exhibit 74, you agree with me that this is a UL  
2 certification report for this model battery cell?

3 A. Yes.

4 Q. So with respect to the battery cell that  
5 was utilized in the Plasma model hoverboards, you  
6 agree that they were UL-certified battery cells,  
7 correct?

8 MR. AYALA: Form.

9 A. It certainly appears they were, based on  
10 this report.

11 BY MR. LAFLAMME:

12 Q. Did you ever ask to see Jetson's document  
13 production in this case?

14 A. I don't recall if I did or didn't.  
15 Normally I would, yeah.

16 Q. The UL test records and certifications is  
17 something that would directly relate to your  
18 analysis in this case, correct?

19 A. Somewhat. They could help if we wanted  
20 to dig into why these specific cells might have an  
21 internal short.

22 Q. Do you have an understanding as to what  
23 testing was required of these cells in order to  
24 obtain the UL certification?

25 A. Not in -- not really, as I sit here.



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1 Q. Do you know if a short-circuit test was  
2 done as part of the UL certification and test  
3 process?

4 A. I believe so, yes.

5 Q. And now in looking at this document, you  
6 are aware that UL 2580 is the standard that applies  
7 to battery cells, lithium-ion battery cells,  
8 correct?

9 A. Yes.

10 Q. You did not know that prior to looking at  
11 this document, correct?

12 A. I did not recall the document number, the  
13 UL number.

14 Q. Did you consult with UL 2580 at all in  
15 your analysis in this case?

16 A. No.

17 Q. And you don't reference UL 2580 at all in  
18 your report, correct?

19 A. Correct.

20 Q. Are you aware of a recall that Jetson had  
21 on a different hoverboard model?

22 A. Yes.

23 Q. What is your awareness of that?

24 A. I believe it was the Rogue model, model  
25 name. I -- if I recall correctly, it was related to

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1 A. Yes.

2 Q. The negative side does not have a cap,  
3 correct?

4 A. Correct.

5 Q. And then you have: Internal materials  
6 are mostly ejected, meaning they would have left the  
7 cell itself, correct?

8 A. Yes.

9 Q. And they would have left the cell through  
10 the end cap?

11 A. Yes. Or along with the end cap.

12 Q. And then you have that that is consistent  
13 with an internal short, correct?

14 A. Yes.

15 Q. And when you say internal short, you mean  
16 a short circuit?

17 A. Yes.

18 Q. And in order to get a short circuit, you  
19 have to have -- does that require communication with  
20 the positive and negative side, meaning the anode  
21 and cathode?

22 A. Yes. Yep.

23 Q. And then, so it's your opinion that  
24 cells 4 and 10, they both had an internal short  
25 circuit, correct?

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1 BY MR. LAFLAMME:

2 Q. And with respect to Exhibit 76, that  
3 doesn't show really any damage to this tab, correct?

4 MR. AYALA: Form.

5 A. That's correct. Just a little  
6 deformation.

7 (King Deposition Exhibit 77 marked.)

8 BY MR. LAFLAMME:

9 Q. In looking at Exhibit 77, which is from  
10 the CT scan in a cross section of cell 4, here we  
11 still see the tab intact, correct?

12 A. Yes.

13 Q. And there's no melting on this tab?

14 A. Not that's apparent.

15 Q. And there was no melting on the tab in  
16 Exhibit 76 either, correct?

17 A. That's correct.

18 Q. And as with cell 10 in Exhibit 76, you  
19 would expect to see some damage or melting to this  
20 tab had there been an internal short circuit,  
21 correct?

22 A. Possibly.

23 MR. AYALA: Form.

24 BY MR. LAFLAMME:

25 Q. And in order to get an internal short

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1 circuit, we talked about how the anode and cathode  
2 need to communicate, correct?

3 A. Yes.

4 Q. And the -- in between the anode and  
5 cathode within an 18650 cell is a separator,  
6 correct?

7 A. Yes.

8 Q. And what is the separator made out of?

9 A. It's typically a polymer, a porous  
10 polymer.

11 Q. So in order for the short circuit to  
12 occur in cells 4 and 10, you need to have a failure  
13 of the separator, correct?

14 A. Yes.

15 Q. If the separator doesn't fail, then there  
16 is no way for a short circuit to occur, correct?

17 A. That's right.

18 Q. And the separator is -- it's independent  
19 to each cell, correct?

20 A. Each cell has its own separator.

21 Q. Right. So -- I guess what I'm getting at  
22 is, so each of the ten cells has its own separator  
23 between the anode and cathode, correct?

24 A. Yes.

25 Q. So in order to get a short at cells 4 and

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1 10, both of those separators, so the separator in  
2 cell 4 and the separator in cell 10 would need to  
3 fail in order to get the communication from the  
4 anode and cathode.

5 A. Yes.

6 Q. And both of those separators would have  
7 to fail at the same time in order to get a short in  
8 cells 4 and 10, correct?

9 A. I don't see a timing requirement for  
10 those to be synchronized.

11 Q. Well, in order to get -- because we just  
12 talked about how you have cells 4 and 10, those are  
13 the two cells that had a short circuit, correct?

14 A. Yes.

15 Q. And both of those cells, when they had  
16 their short circuit, you talked about how your --  
17 the progression of the failure was that the end caps  
18 would have come off on cells 4 and 10, then you'd  
19 get the internal contents and some flame on the  
20 internal portions of the hoverboard, which would  
21 then ignite combustibles by cells 4 and 10, correct?

22 A. Yes.

23 Q. And cells 4 and 10 would have failed at  
24 the same time, correct?

25 MR. AYALA: Form.

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1 A. Approximately, yeah.

2 BY MR. LAFLAMME:

3 Q. So in order to get the cells 4 and 10 to  
4 short circuit, both of their separators would have  
5 had to fail at approximately the same time, correct?

6 A. Yes.

7 Q. Have you ever had any other hoverboard  
8 cases where you believe there was a short circuit in  
9 two different cells at approximately the same time?

10 A. I have not personally had any other  
11 hoverboard cases.

12 Q. Okay. How about any other lithium-ion  
13 battery cases, any others that you can identify  
14 where you believe the -- two of -- at least two of  
15 the battery cells within the battery pack failed at  
16 approximately the same time due to a short circuit?

17 A. Not -- nothing comes to mind.

18 Q. Okay. If you could pull out your  
19 PowerPoint again, and go to the page of the CT scan.

20 Were you able to -- was there any arcing  
21 that was found on any wires within the hoverboard?

22 A. Not that I observed.

23 Q. Was there any arcing -- or are you aware  
24 of any arcing that was found on any wires related to  
25 the Wadsworth house at the site?

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1 A. I thought someone mentioned a possible  
2 arc outside. I'm not certain that --

3 Q. So you are aware that there has at least  
4 been some discussions about some arcing that may  
5 have been found on some wires outside of the  
6 residence?

7 A. Yes, at least some discussion of that  
8 possibility.

9 Q. Do you know where that arcing was  
10 located?

11 A. Somewhere related to the shed, the  
12 smoking shed.

13 Q. So you are aware at least of at least  
14 some discussion about some arcing that was  
15 identified at the smoking shed outside of the  
16 residence, correct?

17 A. Yes.

18 Q. Are you aware of any arcing that was  
19 identified inside the residence, the internal house  
20 wiring?

21 A. No, I'm not.

22 Q. And this hoverboard was located just in  
23 front of an electrical outlet, correct?

24 A. I believe so, yes.

25 Q. And you're not aware of any arcing that

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1 was located on that electrical outlet or the  
2 associated wires, correct?

3 A. I'm not aware of any.

4 Q. And arcing within a fire occurs when an  
5 electrical line is hit by flames or high heat and it  
6 is energized, correct?

7 A. Yeah. If the insulation between the  
8 electrified lines goes away and they contact each  
9 other, then you can get an arc.

10 Q. And one of the tenets -- or one of the  
11 necessities in order to have an arc to occur on an  
12 electrical wire is that it needs to be energized,  
13 correct?

14 A. Yes.

15 Q. Do you know where the electrical service  
16 came into the house at the Wadsworth residence?

17 A. No.

18 Q. And do you know where the electrical  
19 service came into the house in relation to where the  
20 smoking shed was located?

21 A. No.

22 Q. Have you seen any photographs of the  
23 arcing that was identified at the smoking shed?

24 A. No.

25 Q. Looking at the CT scan that you have in



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1 worked on, did you ever see the board that was being  
2 investigated to determine if it had failed?

3 Or did you just see the exemplar?

4 A. I just saw the exemplar, to my memory.

5 Q. And your involvement with that exemplar  
6 was coming up with a process to extract data from  
7 it, correct?

8 A. Yes.

9 MR. LAFLAMME: I'm just going to save  
10 this now, before I forget.

11 BY MR. LAFLAMME:

12 Q. Did you do any testing in this case  
13 relative to the hoverboard?

14 A. No.

15 (King Deposition Exhibit 80 marked.)

16 BY MR. LAFLAMME:

17 Q. I'll hand you what's been marked as  
18 Exhibit 80.

19 And in Exhibit 80, this is from the CT  
20 scan. Can you see the plug receptacle?

21 A. Yes.

22 Q. And that's the barrel with three pins in  
23 it?

24 A. Yes.

25 Q. And looking at the plug receptacle, there

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1 these --

2 A. These are part of the materials provided  
3 to me.

4 Q. So it looks like there is a Salesforce  
5 record in your file that contains this information,  
6 and then it says that it was created by Angela  
7 Kelsey-Flowers on December 20th, 2022.

8 I think that's probably what you're  
9 referring to.

10 A. Yes.

11 Q. Did you ever speak with Angela  
12 Kelsey-Flowers about this note?

13 A. No.

14 Q. So as far as you are aware, at this point  
15 it was just a note that you had in your file about  
16 Ms. VanDongen's conclusion about not being able to  
17 rule out an outside fire?

18 A. Yes.

19 Q. Have you reviewed the Matterport scan in  
20 this case?

21 A. No.

22 Q. Have you done anything to assess the  
23 potential of alternative causes of this fire outside  
24 of the hoverboard?

25 A. No, I have not.

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1 you know, consumer complaints, incidents, anything  
2 that could drive a re-evaluation of what's already  
3 been laid out.

4 Q. Well, in your report here at page 13, you  
5 reference FMEA or other risk assessment to eliminate  
6 unnecessary risks as part of their design process.

7 Do you see that?

8 A. Yes. Mm-hmm, I do.

9 Q. When you say "their" design process,  
10 whose design are you talking about?

11 A. Well, when I wrote this, I mean, the  
12 only -- the only name I was really familiar with was  
13 Jetson, so, you know, at the time in my mind, it  
14 would -- it was Jetson who would do it.

15 Q. Do you have any information as to what  
16 FMEA or other risk assessment process may have been  
17 adopted by the manufacturer for this hoverboard?

18 A. I don't have that information.

19 Q. But you are aware that the battery cells  
20 that were utilized in this hoverboard were UL  
21 certified, correct?

22 A. Yes.

23 Q. And would have gone through the UL test  
24 process to get that UL 2580 certification.

25 A. Yes.

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1 fire analysis in that regard?

2 A. Correct.

3 Q. And with respect to your work in this  
4 case, you were really just focused on the hoverboard  
5 and that's it, correct?

6 A. Yes.

7 Q. Have you ever spoken with anyone from the  
8 Wadsworth family?

9 A. No.

10 Q. Have you ever spoken with any witnesses  
11 in this case?

12 A. No.

13 Q. Has your only contact in this case been  
14 with individuals with Morgan & Morgan?

15 A. Yes. And, of course, at the inspection.

16 Q. Sure. When we were there at the joint  
17 inspection?

18 A. Yes.

19 Q. Do you know what temperature carpeting  
20 starts to melt at?

21 A. No.

22 Q. Is there any additional work that you  
23 plan to do in this case?

24 A. Not -- not that I plan at this time. Not  
25 unless I'm asked to.

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1 in this case.

2           You didn't review any of that, right?

3           A.     Correct.

4           Q.     Did you -- as far as your involvement and  
5 the scope of your involvement goes, is that a piece  
6 of evidence that you feel you need to review for any  
7 reason?

8           MR. LAFLAMME: Object to form.

9           A.     Well, my understanding of my scope was  
10 looking at the hoverboard evidence, you know,  
11 personally, directly, to determine if -- if it was  
12 consistent with a -- being an origin of fire.

13 BY MR. AYALA:

14          Q.     And based upon your understanding of your  
15 scope, do you believe that it -- it is -- all the  
16 evidence you reviewed is consistent with the battery  
17 cells of this hoverboard being, at the very least,  
18 the cause of this fire?

19          MR. LAFLAMME: Object to form.

20          A.     More likely.

21 BY MR. AYALA:

22          Q.     More likely than not?

23          A.     Than not, yes.

24          Q.     Okay. As far as the questions asked of  
25 you regarding V patterns and inverted cone patterns

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1 lithium-ion battery case is this one?

2 A. Yes.

3 Q. And the only one in which you've ever sat  
4 for a deposition related to a lithium-ion -- an  
5 alleged lithium-ion battery fire is this case,  
6 correct?

7 A. Yes.

8 Q. And the only case in which you've been  
9 named as an expert, disclosed as an expert for a  
10 lithium-ion battery case, involving an alleged fire  
11 is this one?

12 A. Yes.

13 Q. You indicated that you considered the  
14 possibility of the fire not starting at the  
15 hoverboard as part of your investigation in this to  
16 Attorney Ayala.

17 Do you recall that?

18 A. Yes.

19 Q. But then later, you said the scope of  
20 your work was to only look at the hoverboard  
21 evidence, correct?

22 A. Was to look at the hoverboard evidence to  
23 see if it is consistent or not with internal -- with  
24 being a fire origin.

25 Q. You have not done anything to assess

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1 whether the fire could have started at the smoking

2 shed, correct?

3 A. Correct.

4 Q. And the only physical evidence that you  
5 have looked at is the hoverboard, correct?

6 A. Yes.

7 Q. And you'll agree that lithium-ion battery  
8 cells can fail when they are subject to an external  
9 fire attack?

10 A. Yes.

11 Q. And you don't -- you haven't done any  
12 assessment to determine how this fire may have moved  
13 through the Wadsworth structure, correct?

14 A. Correct.

15 Q. One of the things that you said is that  
16 an internal short within a lithium-ion battery  
17 should only affect that singular cell.

18 Do you recall that?

19 A. Yes.

20 Q. And in this case, you're saying that two  
21 singular cells had a short circuit, correct?

22 A. Yes.

23 Q. So at substantially the same time, two  
24 different cells in two different parts of this  
25 battery pack had a failure of the separators within

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1 those individual cells, correct?

2 A. Yes.

3 Q. And they had a failure of the separator

4 at substantially the same time to the extent that

5 they both short-circuited at substantially the same

6 time.

7 That's your theory, correct?

8 A. That's what it -- that's what it appears

9 to be.

10 Q. Have you ever had another case where two

11 individual cells short-circuited at the same time?

12 A. No.

13 Q. That would be pretty unusual, wouldn't

14 it?

15 MR. AYALA: Form.

16 A. It's unusual, so far.

17 BY MR. LAFLAMME:

18 Q. Meaning you have to have an individual

19 failure within cell 4, at substantially the same

20 time as you have an individual but completely

21 separate failure at cell 10, correct?

22 A. Yes.

23 Q. That's what you're saying in this case.

24 MR. AYALA: Form.

25 He's said what he's saying.



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1 A. Yes. Yes. I believe it's a coincidence,  
2 but that's what appears to have occurred.

3 BY MR. LAFLAMME:

4 Q. Have you done any research to determine  
5 the percentage chance of that coincidence?

6 A. No.

7 MR. AYALA: Form.

8 BY MR. LAFLAMME:

9 Q. The individual cell itself, the  
10 conditions that we see cells 4 and 10 in after the  
11 fire, those conditions would have the same  
12 appearance if it was an external fire attack as  
13 well, correct?

14 A. Yes. For those individual cells, yes.

15 Q. Meaning when lithium-ion battery cells  
16 fail in a fire due to a fire attack, the appearance  
17 is similar to what we see the two cells that have  
18 failed in this case.

19 A. Yes.

20 Q. You were asked if it's possible to have a  
21 short -- an internal short with the cell -- or,  
22 sorry, with the hoverboard not plugged in.

23 Do you recall that?

24 A. Yes.

25 Q. You'd agree with me that it's very

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1 MR. AYALA: Form.

2 A. Yes, I believe there would be.

3 BY MR. LAFLAMME:

4 Q. Meaning if the hoverboard is plugged in,  
5 while some of the wires may not be energized, there  
6 would certainly be some internal wires that are  
7 energized when it's plugged in?

8 A. Yes, the -- let's see. There would be,  
9 at least from the charger port into probably the  
10 DMS. And that's probably at a fairly low  
11 energization, if the battery -- if it's fully  
12 charged.

13 Q. That section of wiring, though, would  
14 have power to it, correct, meaning it would be  
15 energized?

16 A. Yes.

17 Q. And it would be energized to the extent  
18 that had it been attacked by fire while plugged in,  
19 you could see an arc in that area?

20 MR. AYALA: Form.

21 A. That -- that, I don't -- I don't know if  
22 that's true offhand.

23 BY MR. LAFLAMME:

24 Q. Okay. Regardless, I think we agree,  
25 there wasn't any arcing that was found on any of the

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1 internal wiring in the hoverboard, correct?

2 A. That's true.

3 Q. And there wasn't any arcing found on the  
4 house wiring immediately adjacent to where the  
5 hoverboard was located, correct?

6 A. Not that I read about.

7 Q. As an expert doing an investigation, you  
8 agree that it's important to have as much  
9 information as you can about the fire loss, correct?

10 A. Yes.

11 MR. AYALA: Form.

12 A. In general, yes.

13 BY MR. LAFLAMME:

14 Q. I mean, as an engineer, you want all the  
15 information that's available, right?

16 A. Yes.

17 Q. And you want to have the opportunity to  
18 review all the information that's available during  
19 your investigation.)

20 A. Yes.

21 Q. You don't want parts of the  
22 investigation -- or parts of whatever information is  
23 available to be hidden from you, correct?

24 MR. AYALA: Form.

25 A. True.

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1 BY MR. LAFLAMME:

2 Q. And you agree with me that there were a  
3 number of documents that you've seen here today that  
4 you had not seen prior to today, correct?

5 A. True. Yes.

6 Q. And you indicated that you have not seen  
7 any photographs from the lab inspection at Palmer's  
8 lab, correct?

9 A. Correct.

10 Q. Are you aware at all of what  
11 Mrs. Wadsworth's activities were the evening before  
12 and in the early morning hours before the fire?

13 A. No.

14 Q. Do you know that she had smoked in that  
15 smoking shed a couple of hours before this fire was  
16 reported?

17 A. No.

18 MR. AYALA: Form.

19 BY MR. LAFLAMME:

20 Q. Are you first learning that right now?

21 A. Yes.

22 Q. Did you know that she had upwards of ten  
23 alcoholic drinks that evening?

24 MR. AYALA: Form.

25 A. No.

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1 BY MR. LAFLAMME:

2 Q. You are first learning about that now?

3 A. Yes.

4 Q. Were there any outside studies or  
5 standards that you relied on that were not  
6 referenced in your report?

7 A. I mean, there's literature that I have  
8 read that's part of my general kind of background  
9 knowledge at this point, but --

10 Q. So what is that --

11 A. -- the --

12 Q. Sorry. Go ahead.

13 A. Just that wasn't specific to this case.

14 Q. Okay.

15 A. Yeah.

16 Q. As far as the literature that you have  
17 read over your career as general background  
18 knowledge, any of it that you would reference or  
19 cite as specific to this case?

20 A. Not -- I think it's applicable. It's  
21 applicable information, but I'm not really more  
22 specific than that.

23 Q. Applicable in what way?

24 A. Well, there are some 20 -- I want to say  
25 around 20 -- I want to say 2015 articles on thermal

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1 runaway within battery packs. So those were, you

2 know, it was done in the lab, and people wrote

3 papers about it.

4 Q. When you say 2015, you're talking about

5 the year?

6 A. Yes. Yeah.

7 Q. And that's kind of when lithium-ion

8 battery products were being introduced to the

9 market, correct?

10 A. Yes.

11 Q. So back in 2015 when a lot of these

12 products were first being introduced to the market,

13 there were some articles about how there were some

14 issues with the products from a potential fire

15 perspective?

16 A. Yes.

17 Q. Okay. Are those the articles that you're

18 talking about?

19 A. Yes.

20 Q. And as a result of those issues back in

21 2014-15 and those articles, you understand that UL

22 then got involved and created some standards for

23 products that utilize lithium-ion batteries,

24 correct?

25 A. That sounds reasonable. I'm not really